

90/11 01

MERRY
CHRISTMAS

B·A·R·G NEWS

NOVEMBER 90



© Monthly Newsletter of the
Ballarat Amateur Radio Group

90/11 02

EXECUTIVE COMMITTEE 1990/91.

PRESIDENT	Ian McDonald	VK3AXH		311317
IMH PAST PRESIDENT	Gordon Cornell	VK3KGC	392427	391135
VICE PRESIDENT	Tom George	VK3TOM	355662	327234
SECRETARY	Jim Wright	VK3CFB	327563	
TREASURER	Harry Hekkema	VK3KGL	357563	391001
ASST SECRETARY	George Fowler	VK3DOK	326863	391954
PUBLICITY OFFICER	John Hazledine	VK3CFH	391971	391035
EDUCATION OFFICER	Ian McDonald	VK3AXH		311317
NET CO ORDINATOR	Charlie Stewart	VK3DCS	317425	
TECHNICAL OFFICER	Dick Antosiewicz	VK3AEX	323273	321818
MEMBERS REP	Mary Curnow	VK3NMC	301927	
	Reg Carter	VK3CAZ		

OFFICERS AND COMMITTEES.

QSL MANAGER	Jeff Pigdon	VK3PAP	327041	311211
AWARDS MANAGER	Maurie Bait	VK3XEX	422245	
PROPERTY OFFICER	Dick Antosiewicz	VK3AEX	323273	381818
HAMFEST CONVENER	Kevin Hughes	VK3WN	355011	
WICEN COMMITTEE	Gordon Cornell	VK3KGC	392487	391135
	Tom George	VK3TOM	355662	327234
	Geoff Smith	VK3ADB	332112	321719
TECHNICAL COMMITTEE	Merv Hooley	VK3KAW		311317
	Ian McDonald	VK3AXH		311317
	Dick Forrester	VK3VU	357663	391001
	David McConnell	VK3YNB		
NEWSLETTER EDITORS	Bob Terrill	VK3BNC	395317	391001
	Harry Hekkema	VK3KGL	357563	391001

REPEATERS: VK3RBA - 146.750 Voice. Mt. Buninyong (ch.3)

VK3RBS - 146.900 Voice. Smeaton Hill (ch.6)

VK3RPC - 147.575 Packet. Mt. Warrenheip.

CLUB NET: ON 3.610 Mhz SSB +/- QRM.

Every Thursday at 8PM.

MEETINGS: Held every last Friday of
month at 7.30PM. in the

Ballarat Community Education Centre

Hopetoun St.

Ballarat

PRINTERS

GENERAL & COMMERCIAL

- OFFICE STATIONERY
- BROCHURES
- MULTICOLOUR LABELS
- BOOKS & MAGAZINES

J. A. HOSKIN & SON

21 PEEL STREET NORTH,
BALLARAT

32 6694

Chat-n-Chew
Coffee Lounge
14 Doveton St. N. Ballarat
Ph 053 317303

90/11 03

----- PRESIDENTS NOTE -----

Well here we are almost at the end of another year. This last month has been our busiest for the year with the Hamvention Wicen Exercise and visit to the Orpheus Radio Museum. I look forward to hearing from Kevin VK3WN on how successful this annual event was.

On behalf of the Club I wish to thank all the members and their wives for their participation to make this important day such a great success. Special thanks to Kevin VK3WN for again putting his best foot forward resulting in another great Hamvention.

Dont forget our scramble has ended for this year !! The various winners are listed below and should be present to receive their reward at this months club meeting. The overall aggregate points are also listed which should give some encouragement to those below Tom VK3TOM to see if he can be knocked off his perch when the scramble begins in the new year.

Special thoughts go out to Ron VK3PRJ who has been on the sick list but is now progressing well.

I Would like to wish all members and their families all the best for the coming festive season and hope all have a merry xmas, and a safe and happy new year. A number of things have been planned for 1991 so keep a look out for these.

73's Ian VK3AXH

Scramble Winners

JULY	VK3XOA	48 POINTS
AUGUST	VK3TOM	68 POINTS
SEPT	VK3XOA AND VK3TOM	50 POINTS
OCT	VK3DCS	

Aggregate Points

VK3TOM	155
VK3KGC	144
VK3XOA	138
VK3DCS	126
VK3YMW	81
VK3KGL	57
VK3JAT	42
VK3AXH	38
VK3CCB	32
VK3CIS	17

REMEMBER:- YOU ONLY GET THE RESULT IF YOU PUT IN A LOG !!!!!!!



40/11 04

MINUTES OF GENERAL MEETING HELD 26th OCTOBER 1990.

MEETING OPENED By President Ian AXH at 7.50pm with 38 members in attendance
5 of whom had forgotten their badges. \$1.00 in collecting tin
for Pennyweight Park.

APOLOGIES VK3 VEJ, KQF, DS, NIZ, KIT, CUH.

MINUTES of previous meeting as circulated were confirmed. KGC/AAP

CORRESPONDENCE IN WIA asking for assistance with new repeater on Mt. Ben Nevis.
Maggie CFI requesting assistance with material for Packet
Radio Project at Trinity College Colac.
WIA cancelling meeting of Clubs proposed in November.
WIA Notice of VTAC meeting in Ballarat on 3rd November.
Central Highlands Ministry of Education regarding the
vandalism and thefts from car park. Matter being looked into

CORRESPONDENCE OUT Letter of thanks to ANSETT simulator section.
Maggie CFI requesting information as to materials required.
Director of Education re vandalism in car park.
WIA ordering Call Books and Log Books.

TREASURERS REPORT General a/c \$722.27. VS&L a/c \$2424.15.
Accounts totalling \$364.02 passed for payment. KGL/CAZ

QSL MANAGER Jeff PAP received 540 cards from Bureau.

CLUB NET Charlie DCS reported good support for the net.

EDUCATION OFFICER Ian AXH has received applications from 6 candidates for
the November examinations.

NEWSLETTER Editor Bob BNC made another appeal for articles for
publication. PLEASE HELP.

AWARDS Manager Maury had applications for 3 DX Widows last month.

HAMVENTION Hamvention Convener Kevin WN gave a run down on the
arrangements for Sunday and allocated the few jobs that
still needed filling.

TECHNICAL Dick AEX described the proposed repeater VK3 RWA at Ben
Nevis (letter from WIA in Newsletter) anticipated cost approx
\$1500.00 for building will be met by GTV9 and Geoff ADB has
offered to co-ordinate the project.

Moved AEX seconded KGC that Club be involved. carried.

GENERAL BUSINESS. Moved BNC seconded WN that Club supply Maggie CFI with
equipment as requested. carried.

Moved DOK seconded XEX that the motion changing the price
of Awards passed on 24th Feb 1989 be rescinded. carried.

Cliff CCB suggested that members advertise the awards when
talking on air.

MEETING CLOSED 8.50pm.

73s Jim CFB.

#####

NEXT BARG MEETING Friday November 30th at Education Centre. 7.30pm.

We will meet again on the last Friday in January 1991.

#####

90/11 05

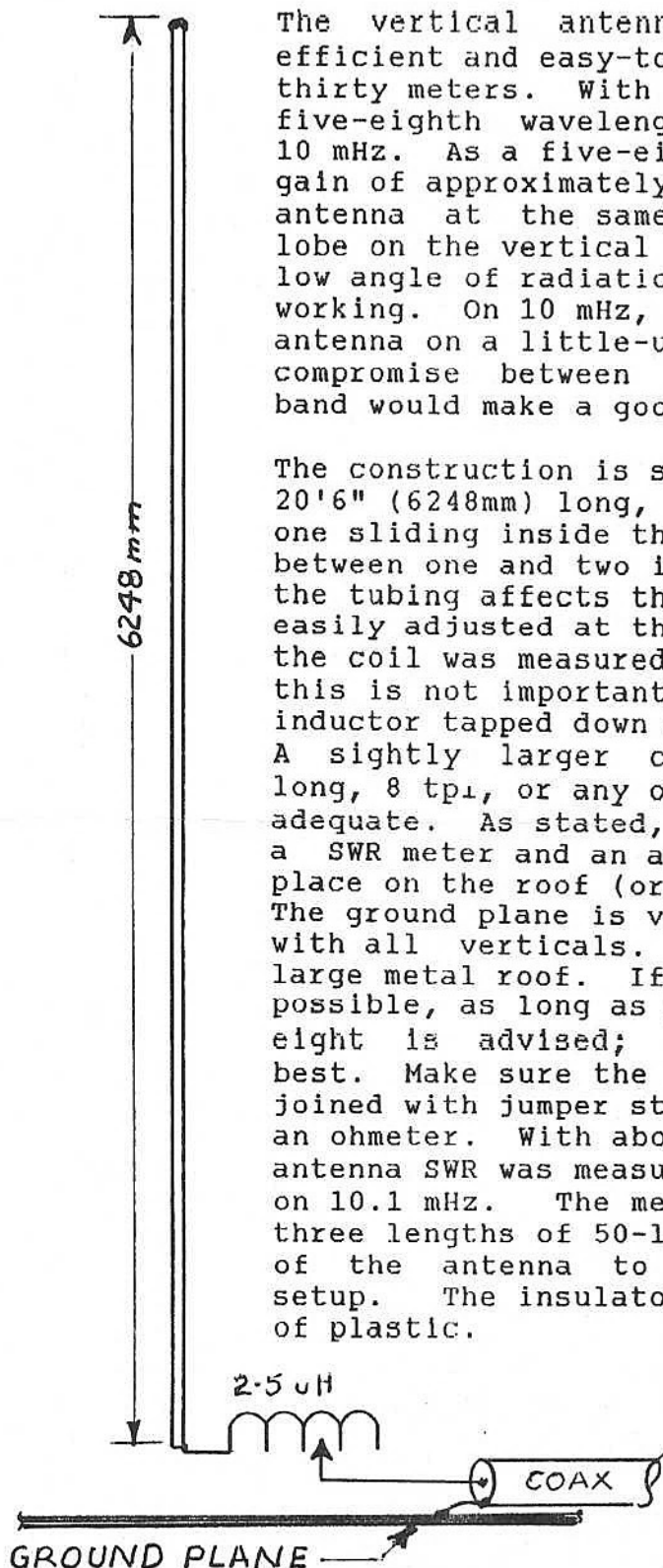
*** AN EASY TWO-BANDER ***

The vertical antenna shown left has proved to be an efficient and easy-to-construct duobander for ten and thirty meters. With a length of 20'6" (6248mm) it is five-eighth wavelength on 28 MHz and quarter-wave on 10 MHz. As a five-eighth wavelength vertical it has a gain of approximately 3dB over a quarter wavelength antenna at the same frequency, due to a concentrated lobe on the vertical plane. It has also an extremely low angle of radiation, which makes it good for DX working. On 10 MHz, it is a standard quarter wave antenna on a little-used band; a band which is a good compromise between 20 and 40 meters. The 30 meter band would make a good 'private' band for Australia.

The construction is simple: the metal vertical is cut 20'6" (6248mm) long, either as one piece, or two tubes one sliding inside the other. The diameter should be between one and two inches (25-50mm). the diameter of the tubing affects the frequency slightly, but this is easily adjusted at the coil. The actual inductance of the coil was measured at 2.5 microhenries (2.5uH), but this is not important, as the coil used was a roller inductor tapped down and adjusted with a SWR meter. A slightly larger coil, 2" (50mm) diameter, about 1" long, 8 tpi, or any of a number of variations would be adequate. As stated, the inductance is adjusted with a SWR meter and an alligator clip with the antenna in place on the roof (or wherever).

The ground plane is very important, as is the case with all verticals. The one used here was simply a large metal roof. If radials are used, use as many as possible, as long as possible. For DX work, at least eight is advised; but the metal roof is by far the best. Make sure the roofing sheets are electrically joined with jumper straps top and bottom, or test with an ohmmeter. With about five minutes adjustment, this antenna SWR was measured as 1:1 on 28.6 MHz and 1.3:1 on 10.1 MHz. The mechanical support was supplied by three lengths of 50-lb fishing line from near the top of the antenna to the gutters; a nearly invisible setup. The insulator at the base was a thick piece of plastic.

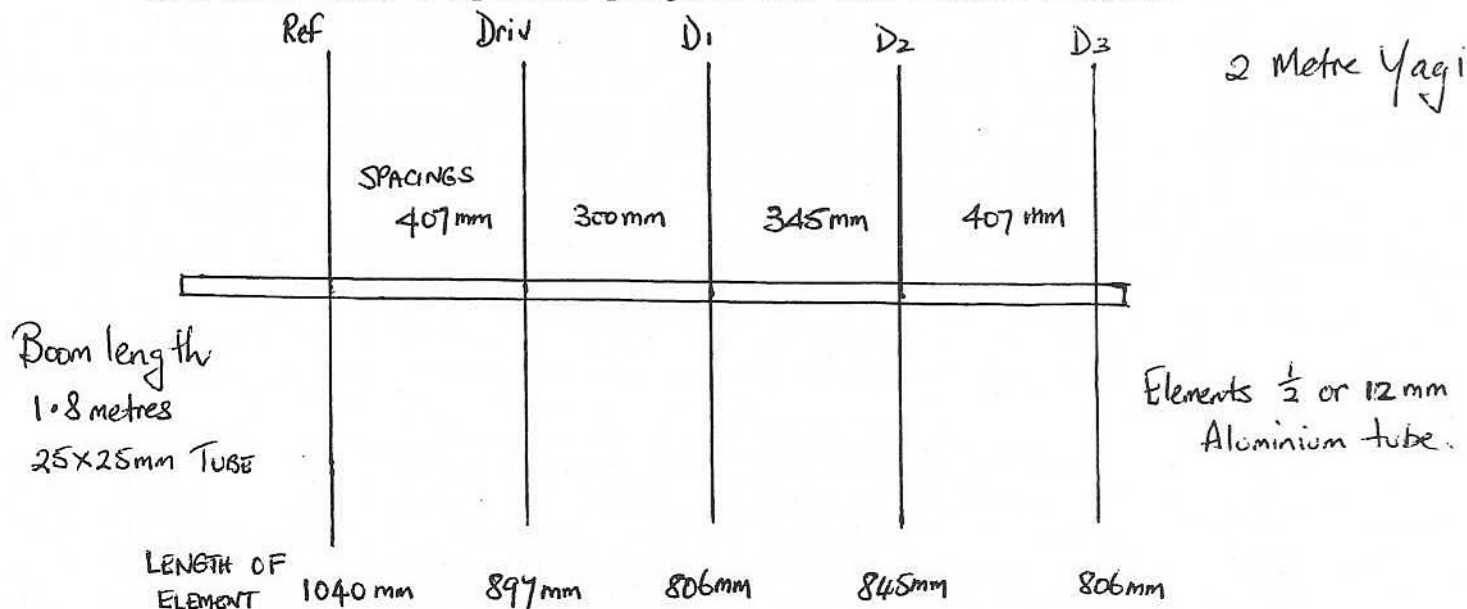
VK2CLM



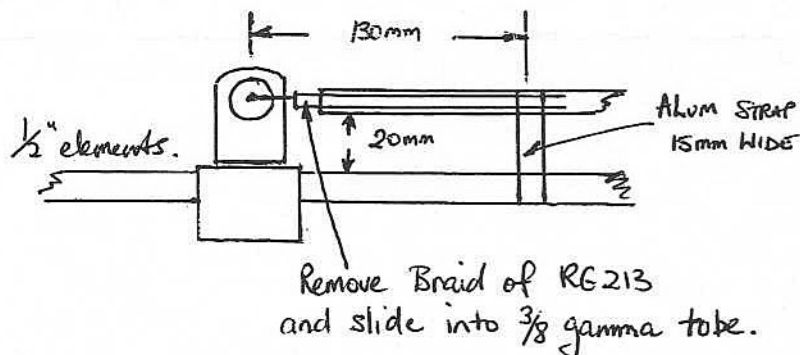
90/11 06

BUILD A 2 METRE AND 70CM YAGI WITH GAINS OF 8dB

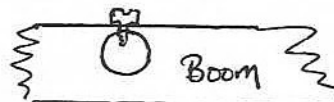
Both of these antennas were tested at the hamvention and given their size and simple construction everyone should have one. Why not make this a special project for the summer season.



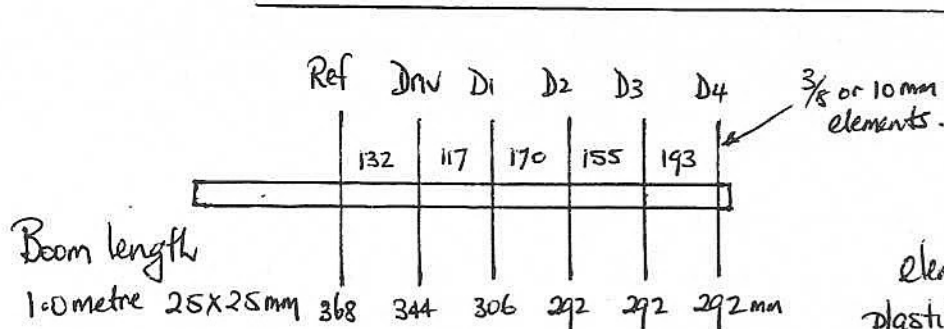
GAMMA DETAILS



Fix ELEMENTS To Boom WITH SELF TAP SCREWS.

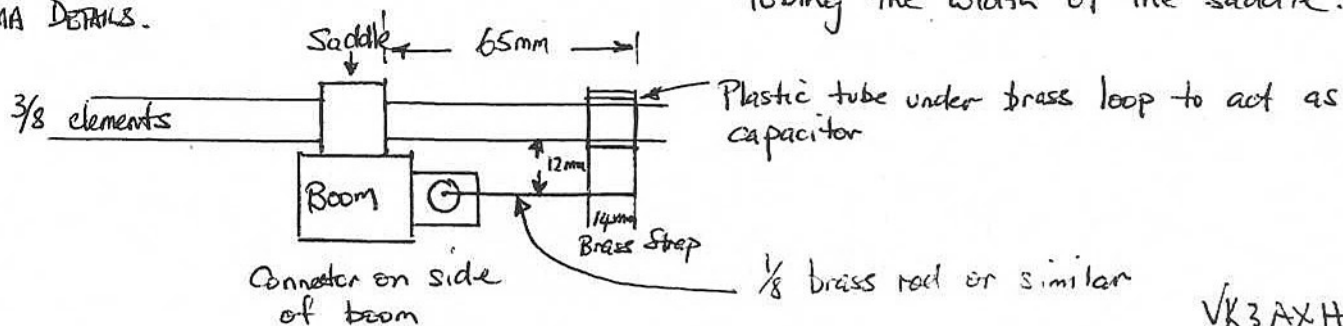


Drill $\frac{1}{2}$ Hole close to one side as shown.



elements held on top of boom with plastic coated saddles. Elements are insulated under saddles with plastic tubing the width of the saddle.

GAMMA DETAILS.



VK3AXH



90/11 07

WIRELESS INSTITUTE OF AUSTRALIA

VICTORIAN DIVISION

38 Taylor Street
Ashburton, Vic. 3147
Telephone 03 259 9261
Fax 03 259 9298

Ballarat Amateur Radio Club,
P.O. BOX 600,
Ballarat,
Vic., 3350.

19th AUGUST, 1990

VT024

Dear Dick,

Re Ben Nevis

Just a short note to confirm our telephone conversation in relation to our site at Ben Nevis.

The Institute have been given permission to construct a small hut at the base of the D.C.F. & L. site at Ben Nevis.

GTV 9 have indicated that they wish to share this site with us and have agreed to share the costs. At this stage the materials will be supply by GTV 9 if we can arrange the construction. I hope that your group can handle this part as you did with Smeatons Hill and manage the site in the same way.

I can be contacted on B.H. 418 3212 and A.H. 799 4240.

Many Thanks for your assistance.

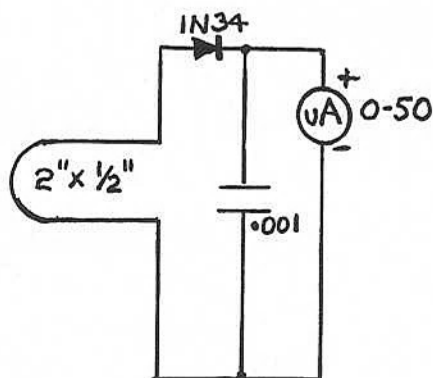
Yours faithfully,

PETER MILL
V.T.A.C. Co Ordinator

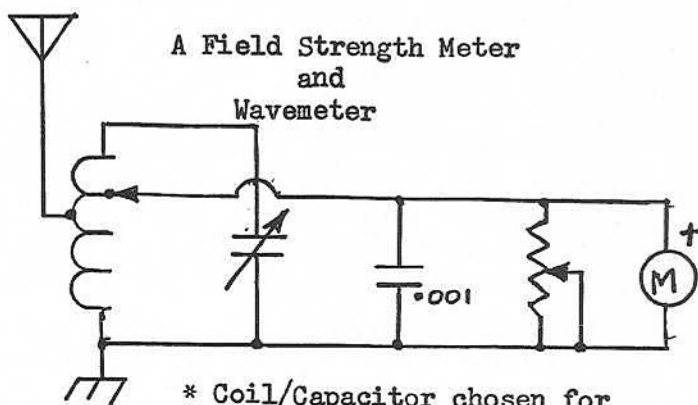
90/11 08

** A SELECTION OF FIELD STRENGTH METERS **

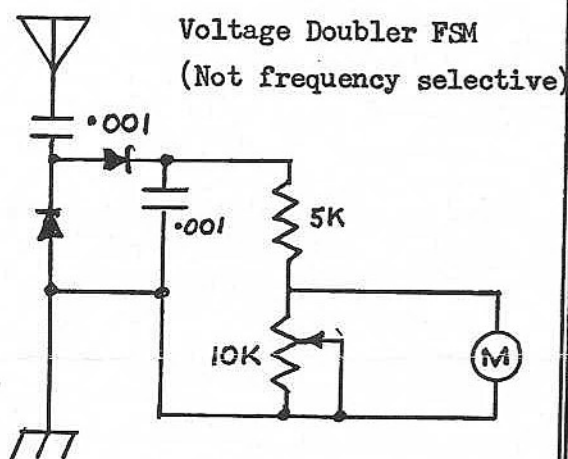
(There's just GOTTA be something in the junk box for one of these!)



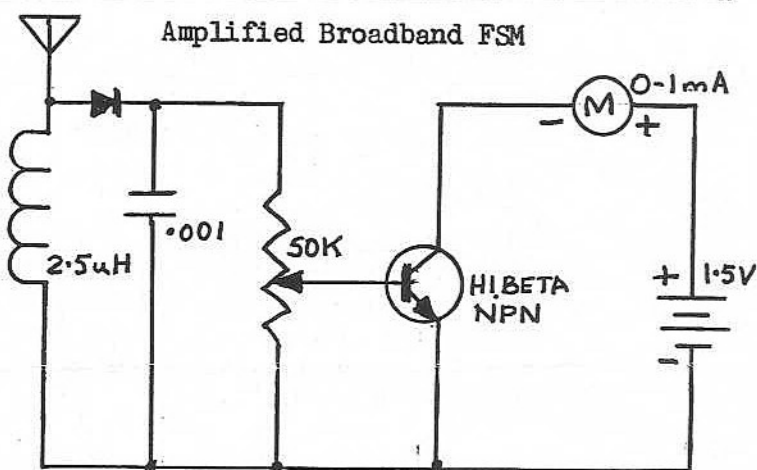
RF Sniffer for RFI



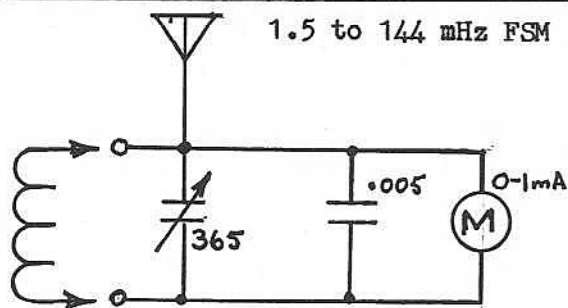
* Coil/Capacitor chosen for resonance at frequency.



Voltage Doubler FSM
(Not frequency selective)

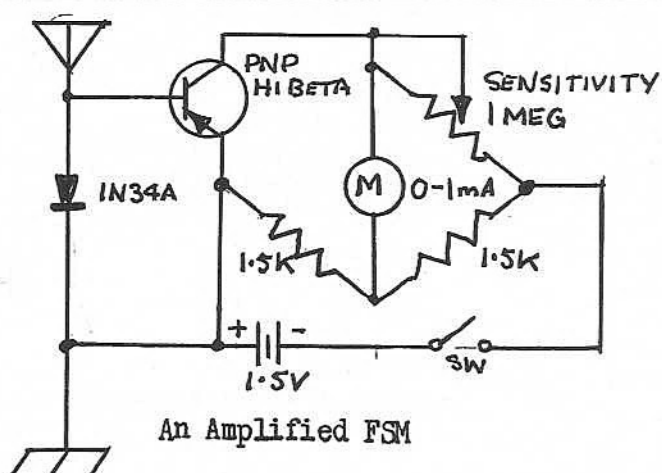


Amplified Broadband FSM

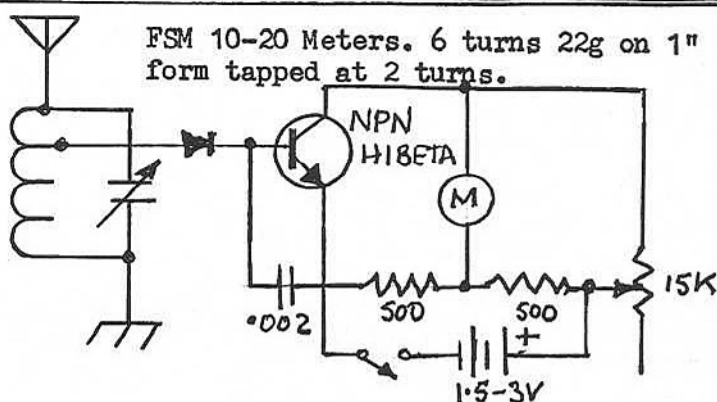


1.5 to 144 MHz FSM

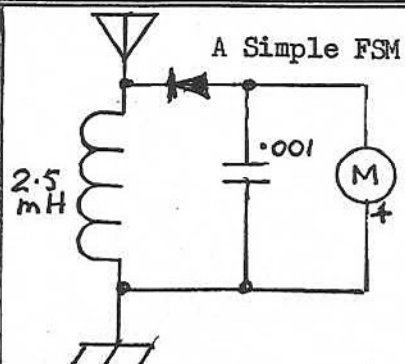
Use a series of plugin coils.
For greater sensitivity use a
50 uA meter, and short connections.



An Amplified FSM



FSM 10-20 Meters. 6 turns 22g on 1"
form tapped at 2 turns.



A Simple FSM

90/11 09

TWO TONE GENERATOR FROM YOUR C64

This program uses the C64 SID sound chip to generate a two tone output for use in checking SSB power levels.

The C64 oscillators do not produce a sinewave, however, if a triangular wave is produced and filtered using the SID filter register, and, it is recorded on to a cassette from the monitor/tv audio. It appears to be very sine like when looked at on a CRO connected across the players speaker.

```

1 REM
2 REM PROGRAM TO GENERATE 2 TONES FOR
3 REM SSB POWER TEST VK3TOM/VK3MOT
4 REM
5 REM F1=LOW FREQ F2= HIGH FREQ HZ.
6 REM F3=LOW FILTER CUTOFF MUST BE >F2
7 REM
8 F1=700:F2=2000:F3=2500
9 PRINTCHR$(147):REM CLEARS SCREEN
10 S=54272
11 REM CLEAR SID CHIP
12 FOR L=S TO S+24:POKE L,0:NEXT L
100 REM SET FOR MAX SUSTAIN
110 POKE S+6,240
150 REM FREQ CALC
160 F=F1/0.06097:H=INT(F/256):L=INT(F-(256*H))
200 POKE S+0,L:POKE S+1,H
240 REM SET FOR TRIANGULAR WAVE
250 POKE S+4,17
1000 REM SET FOR MAX SUSTAIN
1110 POKE S+13,240
1150 REM FREQ CALC
1160 F=F2/0.06097:H=INT(F/256):L=INT(F-(256*H))
1200 POKE S+7,L:POKE S+8,H
1240 REM SET FOR TRIANGULAR WAVE
1250 POKE S+11,17
1490 REM SET UP FILTER PARAMETERS
1500 POKE S+24,31:POKE S+23,3
1511 F=F3/0.06097:H=INT(F/256):L=INT(F-(256*H))
1520 POKE S+22,H:POKE S+21,L
5000 PRINT"HIT ANY KEY TO STOP"
5200 GET A$
5250 IF A$="" THEN 5200
10000 FOR L=S TO S+24:POKE L,0:NEXT L:END

```

READY.

VK3TOM/VK3MOT

90/11 10

A LETTER OF THANKS TO MARY VK3NMC

Gillian is a Year 11 student at Trinity College, Colac. She has been in and out of Colac Hospital all this year. Most times her friends and teachers drop in at Colac District and she is able to maintain contact that way.

Last Monday Gillian underwent a serious, 3-hour operation at St John of God Hospital in Ballarat. Convalescence will be slow and she will need to spend at least 10 days confined to her hospital room. And when you are 16 years old, this can be AWFUL.

So I contacted Fred KQF who contacted Cliff CCB to see if we could arrange a sked. Cliff asked Max YMW to leave a message on my packet setup to say we could. Then Mary NMC visited Gillian at the hospital and transmitted from her bedside.

The students at Trinity who couldn't be available to speak left messages and the ones whose schedules permitted were able to chat with Gillian. David YLV from Horsham gave her a get well too. (Gillian had spoken with him on 146.950 several times during the year.)

Well, it worked well, I thought. My students managed to click the UP button while using the PTT button so the frequency changed a few times! Still, it seemed that Gillian was pleased to hear from us.

Mary stopped us at one point to say that Gillian had gotten quite tired and wanted to listen but was unable to speak further. So the kids all said their goodbyes.

Mary, on behalf of the teachers and students in Year 11 I would like to say thank you for your help. We all very much appreciate the time you took to complete the sked. The only problem is that the kids all want to do it again!

73 de Maggie VK3CFI

FOR SALE.

H.F Transceiver Swan 350. in good condition with operators maintenance handbook and desk microphone. \$250.00 or offer. Charlie VK3DCS Phone 053 317425.

SCANNER. Realistic Pro 2021/200 memory. Good condition. \$350.00
RECEIVER. Yaesu FR101 H.F and V.H.F covers 2 and 6 metres V.g condition \$500.00 . Barry. VK3PGD. Phone 395759.

FOR SALE

=====

AZDEN - 3000 2m FM transceiver. 25 W. Complete with remote cable.

+ 320

David - VK3YNB